

The Usability of an Early College Online Resource

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Abstract: The Early College High School program at the University of Hawai'i — West O'ahu was designed to provide high school students with the opportunity to earn high school and college credit simultaneously while still enrolled in high school. High school counselors are often charged with helping these students apply to the Early College program; but oftentimes do not have enough information about the program to offer comprehensive assistance to students. It is clear that counselors need resources to adequately help students. An effective way to provide information to school counselors is through online sources. However, no online resource for high school counselors exists in the state of Hawai'i. This usability study was conducted to evaluate an online instructional resource website and ascertain its ease of use for counselors seeking to learn more about the Early College program. Data from the study found the online instructional resource to be a highly valuable source of information, with functional accurate content, and easy to navigate. The results of the study suggest that the instructional resource provided high school counselors with a single online source which provided tutorials, instructions, and Early College course information, enabling them to better help their students.

Keywords: Usability Study, Early College, Online Instructional Resource.

Statement of the Problem

In 2014, the Early College High School program became a Hawai'i Board of Education and University of Hawai'i initiative; with the purpose of providing quality college level education to students who are still enrolled within a high school. Students enrolled in Early College classes earn dual credit, which allows the student to earn both high school credit and college credit simultaneously (Mansell & Justice, 2014). Enrollment into these courses shorten the time it takes for students to earn a college degree once they matriculate to post-secondary school (An, 2013; Loveland, 2017; Venezia & Jaeger, 2013). Typically, Early College courses are taught at the high school campus and provide students with the opportunity to earn college credit from qualified college instructors (Lieberman, 2004; Venezia & Jaeger, 2013). These classes also allow students to experience the rigors of college classes while becoming accustomed to college level expectations of academic work (Mansell & Justice, 2014). Research has found enrollees in the Early College program are more likely to graduate from high school and earn higher Grade Point Averages (G.P.A.) in their college courses compared to students who do not enroll into Early College (An, 2013). Leonard (2013) found that college and career readiness goes further than having a set of academic skills, it also encompasses student choice, student dispositions, and high school support networks.

While there are many benefits to the Early College program, high school counselors are often unaware of these benefits and how to assist students with the application process to enroll into Early College. Currently, the only methods to provide counselors with information about Early College are meetings and face-to-face workshops. Furthermore, no single resource about the Early College program exists in the state of Hawai'i. This is important because such a resource could provide counselors with information about the Early College program and the process to apply to this program. By providing a resource website for counselors, it will support counselors to learn and review program information while indirectly benefiting students who seek to engage in higher education. Therefore, an online instructional resource website will be created to serve as a resource and information site of the Early College Program at the University of Hawai'i — West O'ahu (UHWO).

As an Early College Program Coordinator at UHWO, the researcher has seen how high school counselors are uncertain in how to best help their students with Early College questions and applications. Currently, there is no online resource in the state of Hawai'i which contains information about the Early College program. Other states with Early College High School programs use websites to provide information to their partner high schools, parents and students. To address the need within the UHWO community, the Early College online instructional resource website is designed to assist counselors with questions about the Early College program.

The purpose of this usability study was to evaluate an Early College High School online instructional resource website for its ease of use, ability to provide relevant information and resources, for high school counselors at five state high schools, including James Campbell, Kapolei, Nānākuli, Wai'anae and Waipahu. The long-term goal is to increase the resources available to high school counselors and provide information related to the Early College program. The short-term goal is to ensure the website has a) ease of navigation, b) satisfaction of the provided content within the website, and c) interest in using the website to assist counselors with their students.

Literature Review

School staff use web-based resources as an important source of professional information relating to their practice (Beach & Willows, 2014). In order to provide a web-based resource for counselors, a website was created for high school counselors with information about the UHWO Early College program. To ensure the relevance of the content and the ease of use for counselors locating information; a usability study was determined to be the best option to test the website. According to research, usability assesses how easy it is for a person to utilize a user interface or website (Huff, Cline & Guynes, 2012; Krug, 2010). Furthermore, research has found that if a user cannot navigate the website or if the website is too challenging to use, then users will experience frustration and exit the website (Huff, et al, 2012; Oakley & Daubert 2016). Moreover, the usability of a website is known to affect the user's own perceptions, attitudes and willingness to use a given website based on its interface and ease of navigation (Huff et al., 2012). Previous instructional design with websites have focused on designing prototype models for users to test, as well as the creation of questionnaires and interviews; which focus on the attributes of the website such as ease of use, appropriate content, visual design, learning strategies and general appeal of the site (Nelson, Bueno, & Huffstutler, 1999).

Methodology

This study had eleven participants test the online instructional resource website for its ease of use, satisfaction of content within the website, and interest in using the website with their students. There were three rounds of the usability study, with three to four participants within each round. Based upon participant feedback, revisions were made following each round of testing. Revisions to the website were finalized by the end of the third round of testing. The usability study took three weeks to complete. Each round of testing took one week, with revisions taking place shortly at the end of the week.

In order to properly test the online instructional resource website for usability, participants were tasked with performing a cognitive walkthrough in which they were asked to think-aloud as they navigated the website. Participants were tasked with 1), locating information about the UHWO Early College program, 2) how to help students apply to the Early College program, 3) and finding the class information for Early College. Participants watched videos on the application process and viewed various documents and graphics about the program. Camtasia was used to record the participant's cognitive walkthrough, their computer screen and think-aloud as they verbalized their thoughts, navigated the online instructional resource website and completed tasks.

Research Questions/Goals.

The primary research questions of this study are as follows:

- 1) How easy is it for participants to navigate the Early College website?
- 2) How satisfied are participants with the content of the Early College Resource website?
- 3) How did the design of the Early College website affect the participants' interests in using it for their students?

These tasks were chosen because these are authentic tasks; meaning that if participants can complete this set of tasks, then anyone can use this online resource. The end goal of this usability study was to provide high school counselors with a usable online resource. However, in order for counselors to use this site, it needed to be easy to use, navigate and locate the information needed. It is also imperative that counselors are satisfied with the content and information presented in the online instructional resource website in order for them to benefit and better serve their students.

Content Analysis.

The online instructional resource website was designed to hold resources and teach counselors about the UHWO Early College program. In order to teach counselors about the UHWO Early College program, the website included pertinent information about the application process, ADA accommodations, classes, strengths and weaknesses. This information was broken down into smaller chunks and organized into small themes for the counselors to locate on the website. Content was sorted into three themes, 1) Learning, 2) Applying and 3) Class information.

The learning domain used to design instruction and inform the usability of this project is the cognitive domain. This domain of learning is part of Bloom's taxonomy and comprises six levels of learning; knowledge, comprehension, application, analysis, synthesis and evaluation (Mohammed and Omar, 2020). According to Land and Ziomek-Daigle, (2013) the cognitive domain contains three sub domains of verbal knowledge, organization of prior knowledge, and cognitive strategies to aid in knowledge acquisition. In order to enhance the learning experience and transfer of knowledge to learners, the application of the learning content is vital; thus instruction needs to focus on the application of the content for the learner (Land & Ziomek-Daigle, 2013). Instruction created within the cognitive domain of learning, is viewed as a collection of knowledge and information which connects interactions between learners and a task or assignment (Land & Ziomek-Daigle, 2013). To aid in the transfer of learning, the instructional designer emphasized comprehension and reflection within the instruction in order to assist learners with the application of these newly acquired skills (Land & Ziomek-Daigle, 2013). Thus, the cognitive domain informs the design to focus on the knowledge gained from the online instructional resource website, the ability to understand the information, and the ability to apply what was learned to their own skills and practices.

Participants.

The target audience for this instructional design was Hawai'i Department of Education (D.O.E.) high school counselors currently employed within five high schools on the Leeward Coast of the island of O'ahu. These high school counselors were selected due to their high school partnership with the UHWO Early College Program. Each of the counselors are currently employed within James Campbell, Kapolei, Nānākuli, Wai'anae or Waipahu High Schools. According to Mansell and Justice (2014), high school students and high school counselors often do not know about the benefits of registering for Early College classes and do not take advantage of the dual credit benefits these classes provide. Research has shown that for high school counselors to be aware of these benefits, more information must be provided and made accessible (Land & Ziomek-Daigle, 2013; Loveland, 2017; Mansell & Justice, 2014). High school counselors are crucial to developing and establishing Early College programs at the high school (Loveland, 2017). In addition, counselors also spend a significant portion of their day helping students with academic, career development and personal issues (Mau, Li, & Hoetmer, 2016). Therefore, high school counselors are pivotal in sharing information with students and families about the potential risks and benefits of enrollment into Early College; as well as the value of taking these classes (Loveland, 2017). This is especially important as counselors often serve as site coordinators and are charged with monitoring the students' academic performance within both high school classes and the Early College classes to reduce the risks of students earning a failing grade (Loveland, 2017). Thus, counselors are critical to not only the success of the Early College program; but to the success of students as well (Loveland, 2017). It is for these reasons that high school counselors were the target audience for this study.

The researcher has an established working experience with these counselors and contacted the participants via telephone and email. A script was used to explain the purpose of the study is to test the website; specifically how well people are able to use the website and that the study was not to test participants. During initial contact and again during the usability session; participants were made aware that the study was voluntary, their responses were private, and that they could leave the study at any time they choose. Participants were told that the usability study would take

forty-five to sixty minutes of their time. Eleven counselors (n=11) were enrolled in the study. The participants ranged in age from 27 years of age to 69 years of age; with an average age of 45. There were five females and six males who participated in this usability study. The researcher has observed that these counselors have exhibited high levels of commitment and truly enjoy helping students become successful adults. In addition, these counselors have strong empathy skills and relationships with their students; oftentimes assisting students with their academic choices and providing emotional support. These characteristics of the counselors match current research on counselor responsibilities and qualities. Counselors are focused on student success such as academic, career and social (Mau, Li, & Hoetmer, 2016). Furthermore, each of these counselors assist students with the Early College classes at their high school. In addition, the researcher has strong professional relationships with each of the counselors due to the partnership between the high schools and the UHWO Early College program. In conversations with the counselors, the researcher has learned these counselors want a web-based resource to aid them in their ability to work with students and to provide them with additional information about the program.

There was no risk to participants in this study. The design of this study was to test the website and not the participants. While there was no immediate benefit to participants, there could be a potential benefit for the counselors if the website proved to be a valuable resource in their jobs. At the conclusion of this study, participants were able access to the website for their use. Participants were given a \$5 gift card to Starbucks to thank them for their time and participation. Data collected from the study was stored in an encrypted password protected file. No identifiers were used to identify participants. Pseudo-names were used to name participants.

Evaluation Instruments.

Participants were asked to complete a cognitive walkthrough where they had to think-aloud as they navigated the website in the usability session. This was done in a face-to-face setting in a location and time convenient to the participant (Appendix A). Testing was conducted by the researcher in February 2020 where participants did a cognitive walkthrough; which is a usability protocol where participants are asked to complete four scenarios/tasks (Appendix B). Prior to the usability study, participants were asked to complete a pre-survey (Appendix C) to collect demographic information and to assess their knowledge of the UHWO Early College program. The pre-survey and post-survey was created on Google Forms and was emailed to the participants. Participants were emailed a three-digit code to use for the pre-survey and the post-survey. This better enabled the researcher to track participant's survey responses. After the conclusion of the cognitive walkthrough, participants were immediately emailed a Google Forms post-survey to provide feedback on the usability of the website (Appendix D). Post-survey questions were adapted from the System Usability Scale (SUS) and from the Design-oriented Evaluation of Perceived Usability (DEEP) adapted from Brooke (1996) and Yang, Linder, and Bolchini (2012). Deception was not used in this study. The usability study took forty-five minutes to complete while the post-survey took fifteen minutes to complete; the total time of the research study was sixty minutes.

Results from the cognitive walkthrough and the Google forms were analyzed using SUS and DEEP analysis. The screen recordings were used to analyze participants' navigation of the website. The SUS and DEEP were used to analyze usability feedback and the recorded

navigation of users as related to specific aspects of website usability in order to guide the redesign of user-sites (Yang, Linder, & Bolchini, 2012). DEEP was used to analyze the content, structure/information of the website, navigation, and labeling of the website. Content referred to the values, message and information the website conveyed to participants while also ensuring that key graphics or videos relayed key content to the user (Yang et al., 2012). The structure/information analysis of DEEP focused on ensuring categories of information were divided into logical sections which could easily be learned by the user while allowing the user to efficiently navigate within the information structure (Yang et al., 2012). Labeling was concerned with the user-interface as participants navigated the website and provided clues on where participants were supposed to click next (Yang et al., 2012).

Project Design.

The UHWO Early College online instructional resource website was created using Wix.com due to its accessibility and flexibility with website design. Camtasia was used to create video tutorials on the application process for the Early College program. A brief video about the UHWO Early College program was also created to provide learners with information and goals of the program while another set of videos taught counselors how to do the Early College applications. These videos were designed using the multimedia principle. This principle states that people have improved learning experiences from words and pictures compared to the use of pictures alone (Mayer, 2014). Each of the videos and graphics used in the website were designed to cue the learner on the topic of the webpages and to help scaffold the content. Information from the website was broken into small chunks to ease learning; specifically, webpages with similar content facilitated knowledge transfer to the learners. The videos, in conjunction with documents, handouts and tools on the website were designed for counselors to apply what they have learned to their interactions with students. Color theory was used to guide the visual design and layout of the website. Soft value colors such as light gray were used for the background of the website while strong hues such as blue were used to denote important information to the users. The colors for this website have low saturation levels for a cohesive visual design for the user.

The online instructional resource website originally contained five tabs to provide users with information about the Early College program. The “Home” tab took participants to the main page of the website and provided some brief information about the UHWO Early College program and mission statement. The “Learn” tab contained information such as the benefits and weaknesses of the program, deadlines to apply to the program, how Early College credits earned could be transferred within the UH System, as well as Americans with Disabilities Act (ADA) accommodations for counselors to provide to their students. The “Apply” Tab had videos, documents and instructions on how to help students apply to the program. The “Classes” tab contained a course description of the Early College classes taught at the high school and when the class is taught in a given semester. Lastly, the “Contact Us” tab was created for users to contact the Early College program for additional questions or information.

Procedures.

This study took place at locations convenient to the participants. At these locations, the researcher had participants conduct a usability study of the UHWO Early College online instructional resource website. Data was collected from screen recording software which captured the participants’ computer screens as they navigated the website while audio recordings

were used to record the participants thinking-aloud as they completed a cognitive walkthrough of the site. During the test, participants were asked to complete four usability tasks related to the website. At the conclusion of the usability study, participants completed a Google Forms survey about their experience using the website. All recordings captured from this study were encrypted and saved in a password protected external hard drive. The password and recordings were only accessed by the researcher.

Participants were asked to complete usability scenarios to test the website's navigation and content. These participants were supplied with a laptop, which included software to record their navigation and cognitive walkthrough. The following four tasks were given to participants to complete:

- 1) Find information about the Early College Program.
- 2) Find information on how to apply to the Early College Program.
- 3) Find the Early College class descriptions for their high school.
- 4) Find a way to contact the UHWO Early College Staff.

These tasks were selected for their ability to scaffold the presented information of the website to provide the participants with knowledge of the program, understanding of what the program can do for students and to aid counselors with the application of helping their students to apply to the program. Scaffolding was used to provide prompts and hints within the design to support the instruction of the content (Puntambekar & Hubscher, 2005). Before starting the usability study, participants were encouraged to think-aloud while they performed the tasks. At the conclusion of the study, participants were asked to complete a Google forms survey to provide additional feedback on their experience of the website.

Timeline

This project was completed over a period of two semesters starting in Fall 2019 and concluding in Spring 2020 (see figure 1). The Fall semester included the creation of the UHWO Early College online instructional resource website, consent forms, questionnaires and planning for the implementation of this research study. While the Spring semester was focused on contacting participants for the usability study and data analysis. There were three rounds of testing with three to four participants in each round. At the conclusion of each round, the researcher revised the website based upon feedback from the usability study. Once the revisions are complete, the researcher will begin a new round of usability testing. At the conclusion of the third round of the usability study, the researcher analyzed the results of the data.

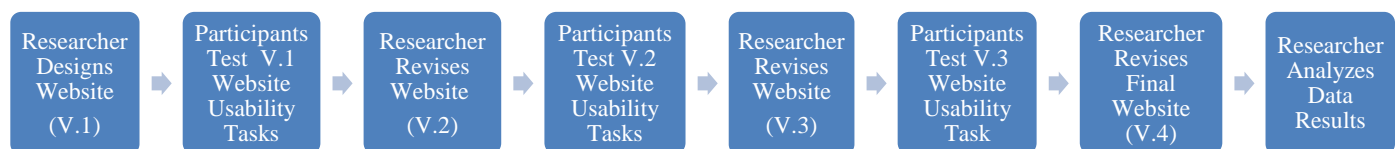


Figure 1: Procedural Guidelines.

Analysis & Results

Upon review of the Camtasia screen recordings and post-survey results; errors were classified into three categories: Minor, Major and Critical. Minor errors were classified as spelling and punctuation. Major errors were classified as user-interface issues which did not allow users to interact with the site or complete tasks. Examples of major errors were mislabeled buttons or confusing images. Critical errors were classified as issues which caused confusion with participants or was missing crucial information.

Minor: There were a number of minor issues, mostly pertaining to spelling or phrasing. These were easily corrected during the usability testing. Sentences were reworded, combined or removed to provide greater clarity and function on the site.

Major: There were three major errors. The first error was the placement and color of the buttons. During the first two usability rounds, four participants missed the web-page buttons to access additional information. In their think-aloud, the participants asked for the information which was located on the buttons. This informed the researcher that both the placement of the buttons needed to be changed as well as the color of the buttons. The coloring was initially a mint green, but using color theory, these buttons were changed to a vibrant orange to better compliment the blue background and to allow the buttons to be visible to users. The buttons were moved from the bottom of the textboxes to the left side of the screen. In the third round of usability, all participants were able to locate this information. The second error was missing headers to videos and resources and adding these to help guide the user. The last error dealt with the interactivity of the website. Initially, the site incorporated static images to help guide the users. However, these images were changed based upon participants clicking on these static images. The new images were designed to be interactive and allow participants to engage with them.

Critical: There were two critical issues which negatively impacted the website's usability. The first was the navigation menu buttons. For the first task, the users needed to locate information about the Early College Program. This required them to click on the "Learn" label to complete the task. However, in the first usability round, only one out of three participants (33%) was able to navigate to this tab. To address this issue, the tab was relabeled as "Orientation" for the second round of usability. Although there was still an issue of navigation in the second round as half of the four participants (50%) did not complete task one. This button was relabeled for the final round of usability as "About." All participants (100%) in the last round of testing were able to quickly navigate to this page and complete the task. Finally, the biggest issue had to do with the tutorial videos. Originally, these videos were coded directly into the site without being uploaded to YouTube. This was done to bypass the HDOE YouTube restrictions. However, because these videos were directly coded into the website, users were unable to effectively interact and scroll through these. Furthermore, these videos images were cropped and did not allow the users to view the whole video picture. This was quickly corrected for usability round two and videos were remade and uploaded to YouTube.

The System Usability Scale (SUS) was administered to the participants after each round of the usability study. This scale evaluates a website for its usability and functionality. The average score for a website which is considered usable is a 68. However, the higher the score the more usable the website is and more likely to be recommended to other users. The average score for

group one was 95.00 ($SD = 6.61$). The second usability group had an average score of 92.00 ($SD = 10.68$) while the final usability group had an average score of 87.00 ($SD = 10.90$). According to the SUS, these scores indicate the website is usable, functional and it is likely to be recommended by people.

Content.

Using DEEP analysis, surveys focused on the perceived content of the website, structure of the website, navigation and labeling of the website. Participants found the content of the website to contain information that they would expect to be there. These participants also found the information to be informative as well as well as comprehensive. Additionally, participants found the website easy to understand and logical (see figure 2). Across each usability section for the website, all groups agreed that the content of the website was easy for them to understand and use.

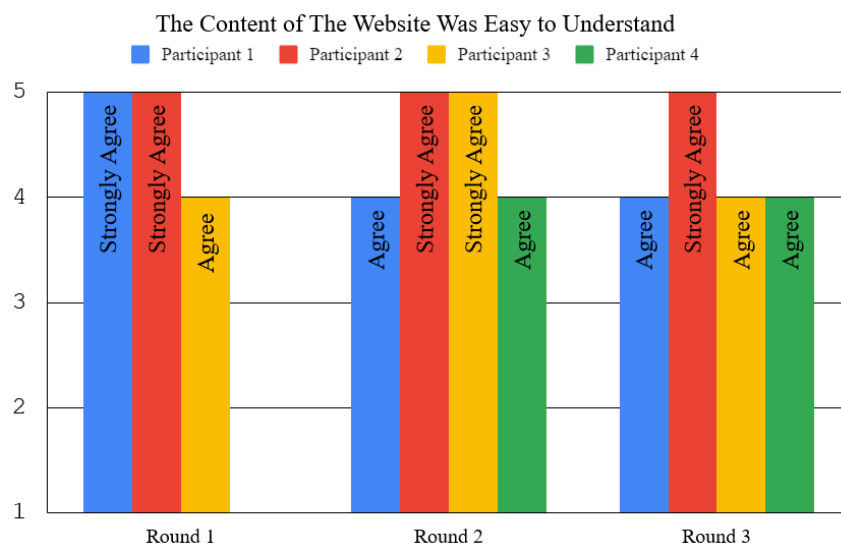


Figure 2: Content of Website was Understandable

These responses closely align with DEEP and the design of content. Oftentimes, the content is the most important component of a website for users when viewing a website for the first time. The content of a website must communicate clearly and provide valuable information to its intended audience (Yang et al., 2012). Winston, one of the participants, had this to say about the content of the site,

“The guides and videos are great resources. A lot of times, people do not have time to read the guides. But having the videos helps to save time and helps students who are visual learners.”

This quote best describes the participants overall feelings about the content of the website and confirms the content was understandable for the counselors’ purposes. This data also answers research question two by confirming that participants are satisfied with the presented content of the website.

Structure.

Moreover, participants found the overall structure of the website to be well organized. All eleven participants (100%) reported the ease of locating all relevant information (see figure 3). By using the menu tabs, participants were quickly about to locate the information they needed. The subheadings of each section provided the participants with guidance on the information presented on each webpage.

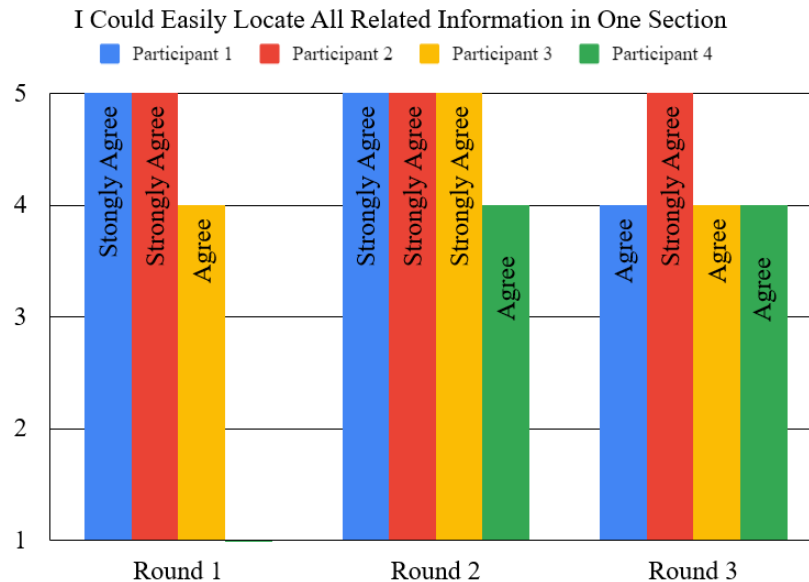


Figure 3: Locating Information on the Website

This data showed that participants could quickly navigate the website to locate any information they were seeking. This confirms that the structure of the website information was organized and usable. Specifically, research has shown that if the content of a website is structured in a meaningful and logical order while also divided into smaller sections, it allows participants to quickly locate information (Yang et al., 2012). However, if the structure is disorganized, it can quickly lead to user frustration.

When asked about how the information was structured and presented, Bruce one of the participants stated,

“All the information and guides are on one page. This makes it easier for us and for students to locate the information we need without having to click on multiple pages to find what we need.”

Navigation.

Regarding navigation of the website, all participants agreed that the website provided enough cues to help them navigate. Consistently, across each round of test, participants were able to navigate quickly to their assigned tasks and felt that the site was able to guide them to the information they sought (see figure 4).

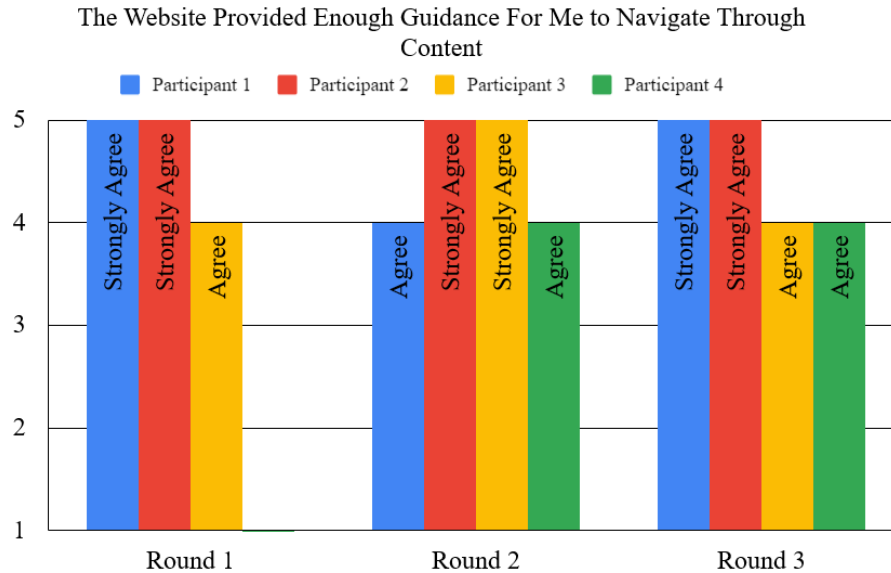


Figure 4: Navigation of the Website

This data is confirmed by DEEP which states that the objective of navigation is to provide users with convenient avenues and interactions to properly locate information within the website (Yang et al., 2012). Furthermore, with the ease of navigation, nine of the users (82%) were able to navigate the website to complete their assigned tasks. As he was navigating the website, Clark, one of the participants stated:

“The six tabs make it very easy to find information. It’s not like I have twenty tabs to go through. It’s very simple to use.”

These two quotes best reflect the participants’ feelings of the structure of the website and its ability to provide cues for participants to navigate. Furthermore, the data and the participants’ own thoughts and explanations help to answer research question one relating to the participants’ ability to navigate the site as all participants agreed that the site could be easily navigated.

Labeling.

Lastly, participants found the labeling of the buttons and menu bar to be helpful as they navigated the website. All eleven (100%) participants felt like the labeling was clear and that it helped them to know where to click (see figure 5). However, during the usability sessions, two participants clicked on different labels to complete task one. More importantly, two other participants (18%) missed clicking on buttons during their navigation of the website. To address this error, the menu tab “Orientation” was relabeled to “Learn,” then ultimately relabeled as “About.” The buttons within the website were relocated, with participants suggesting headers be attached to help guide users to click on them.

When I Skimmed Through The Labels, I Knew Where to Click

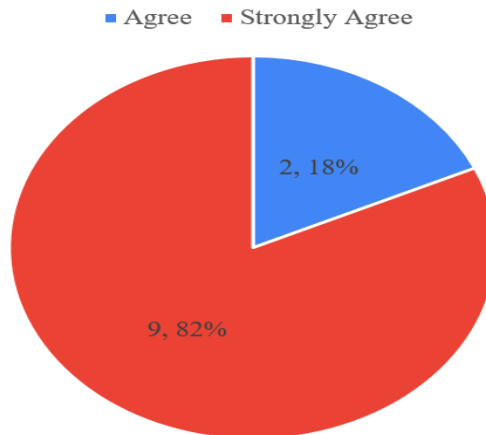


Figure 5: Knowing Where to Click Based on Website Labels

When commenting on the labeling of the website, Bruce stated,

“The buttons blend in too much with the blue background. They need to “pop” out on the screen. They should be a brighter color such as orange.”

Based on this suggestion, the buttons were recolored orange. After the change in color, participants tended to notice the buttons and began to click on them. This quote best exemplifies DEEP as it pertains to labeling buttons. Labels guide users to the information they need by directing them where to go and what to expect from clicking on the button (Yang et al., 2012). Conversely, mislabeled buttons can cause the users to experience frustration or confusion. This was expressed by one participant as they were searching for resources.

Satisfaction.

All participants reported satisfaction with the website, with seven participants (64%) extremely satisfied with their experience (see figure 6).

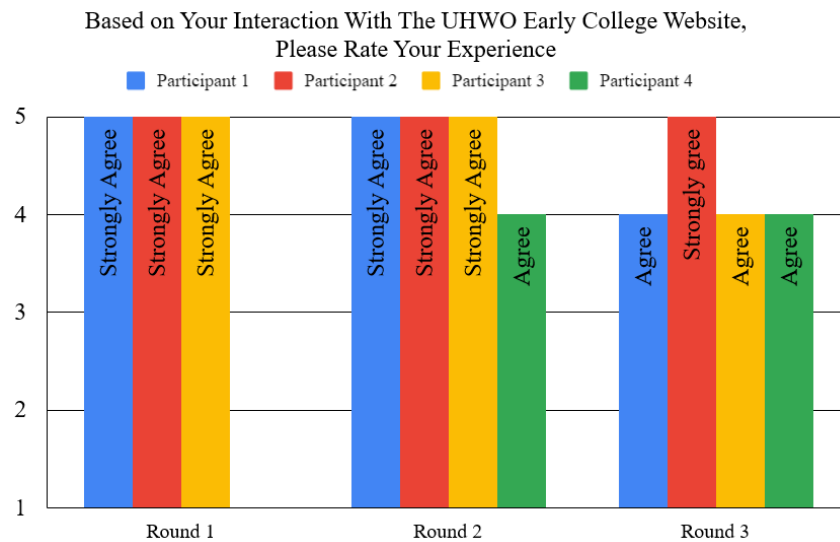


Figure 6: Overall Participant Satisfaction of Website

Furthermore, all eleven participants (100%) reported that they would recommend this website (figure 7). Both of these graphs help to answer research questions two and three by showing participants were satisfied with the website and would recommend others to use the site.

How Likely Are You to Recommend This Website?

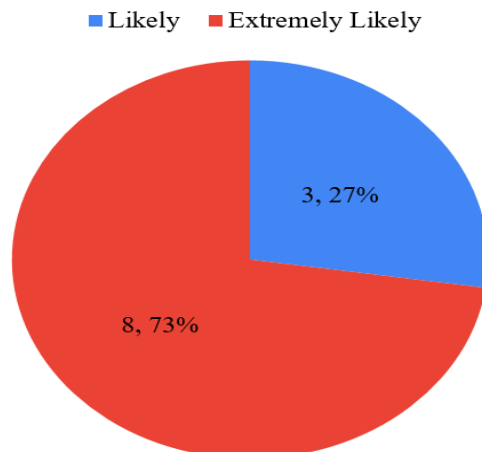


Figure 7: Recommending Website for Other Users

Three of the participants (27%) expressed joy and questioned how soon they would be able to use the website not only themselves, but for students and parents. One quote that best describes participant excitement was from Diana in which she stated,

"I would recommend this website to parents, counselors and even students who want to know as it provides resources and answers a lot of questions."

Through thematic analysis, two themes quickly emerged from participants. One theme was the simplicity of the website. All participants commented on the site as being easy to use and locate information. Ruth commented, *"It's fast to use and I can see myself using this."*

The second theme referred to the resources provided by the website. All participants commented on the resources such as the guides and tutorials as being most helpful to them. Each of the counselor's felt the website was able to provide a wealth of information to better help them work with students. Moreover, they felt that these resources can help people who do not know much about Early College. Furthermore, four of the participants (36%) expressed a desire to see resources, tutorials and guides for other UH Colleges which offer Early College classes. These counselors expressed a desire to see this additional resource to help them work with their students.

Discussion

The System Usability Scale showed that this website is both usable and that participants were satisfied with the website. However, there was a drop in the scores from groups one and two, to group three. This variance can be explained due to three external factors. The first factor is the website also utilized links which redirect the user to the UH System Application for all UH Colleges. During usability testing for group three, the researcher was unaware that the UH System Application was down for maintenance over a period of three days. When the participant was testing the site, links were not functional and caused frustration for the user. The second factor is that each of the four participants felt the website should have also included information, tutorials and guides to apply to another UH System campus. However, the focus of this study was an online instructional resource website for UHWO Early College, and thus it did not focus on other UH Campuses Early College programs. The last factor is that additional content was added to each revision of the website. This additional content provided participants new items to critique and provide feedback.

Based on feedback from participants, several changes were made to the website. During the first usability session, participants did not recognize the buttons they could click on. One of the participants stated the mint green color of the buttons blended in with the blue background of the website. This participant suggested changing the color of the button to an orange color so it could “pop” on the screen. Using this feedback, the research used color theory and a color wheel to locate a color which would complement the blue background of the site. Using a color wheel, the researcher selected an orange color for these buttons. This change helped participants in the next rounds quickly locate the buttons. Another important change was replacing the static images with photo galleries and Piktocharts. Throughout the first usability session, participants would click on the various images of the site expecting something to happen. Upon review of the screen recordings, the researcher noticed that users were clicking on these items expecting to interact with them.

To meet this need, the researcher created interactive Piktocharts which contained information about ADA Accommodations as well as a quick guide about the Early College application requirements. Photo galleries were also added to the site which automatically would rotate and display various pictures which highlighted the Early College program. Another change was the relabeling of the Menu tab labeled as “Orientation.” This button was relabeled twice based on three participants failing the initial usability tasks, and a few other participants unsure of where to go to complete the task. This was changed to “Learn” before finally being changed to “About.” With this new label, participants in the final round of usability testing were able to complete all of the assigned usability tasks with no difficulty or errors. The last change made was the addition of a new section within the website. When initially created, the webpage had only five tabs (Home, Orientation, Apply, Classes, and Contact). However, participants in the first round expressed a desire to see a page of Frequently Asked Questions page. Immediately after the first round, the researcher created a FAQ page with questions and documents to answer any questions which may arise. Usability rounds two and three found this new addition to be helpful to their questions and would often navigate to the page in-between usability tasks.

Conclusion

The outcomes of this study are important for the state of Hawai'i as it fills the need for an online resource for Early College. Not only is this website usable, but each of the participants cited this resource as a need throughout the usability study. While no single website or resource about the Early College program exists in the state of Hawai'i, several of the participants expressed a desire for an Early College website for each of the UH System campuses. More importantly, the participants stated this website would not only help them, but could be used as a guide for students while also helping students to answer any questions they may have. This website is now open and accessible by the counselors.

There were several limitations to this study. The first being that not all video tutorials could be played at a HIDOE school site. This is due to YouTube being blocked on the HIDOE Wi-Fi Network. Future studies and websites will need to take this into account and create videos which can be played on a HIDOE Wi-Fi Network. Another limitation is the scope of the website itself. The website is focused only on the UHWO Early College program and does not include information from other UH Colleges Early College programs.

However, this is not the end of the study. This study shows that additional work needs to look at creating additional websites for each of the UH system Early College programs or one unifying website with information from each of the participating UH Campuses. This website should also address student and parent questions in addition to function as a resource for counselors. Future websites and studies should expand its scope and include all UH System Early College programs. This can ease the confusion counselors feel when working with multiple UH Campuses, each with different requirements. More importantly, while this project was designed for counselors, future projects should also address parent and student needs. The next phase of development will address this demand by focusing on creating resources for parents and students.

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Appendix A – Phone/Email Script

Aloha,

This is Brandon Carlos from the UHWO Early College Program. I am contacting you to see if you are interested in participating in a usability study for my LTEC Masters project. The purpose of this study is to evaluate the usability of a newly created Early College website. This study will take approximately an hour of your time and can be conducted at a time and place convenient to you outside of work hours and during February 2020. You will receive a Starbucks gift card for your time. Any personal identifiable information collected from this study will not be published, and you can quit the study at any time with no penalty.

The study is being conducted as part of a graduate project to fulfill my program requirements at The University of Hawai‘i at Mānoa in the College of Education, Learning Design and Technology.

Your Participation would be greatly appreciated. Thank you for your time!

Appendix B – Usability Script

**Cognitive Walkthrough Protocol
Usability of Early College Resource Site****Technology Set-Up Checklist (Facilitator Computer)**

1. Facilitator should set up his computer and attach all cords/peripherals
2. Plug in to a power outlet (don't trust the battery)
3. Make sure the computer is connected to the Internet if you are using online resources
4. Prepare Camtasia software and do a brief test to ensure
 - a. Video of screen is captured
 - b. Video from webcam is captured
 - c. Audio is captured

After computer is set up:

1. Load your wireframes in whatever presentation software you choose to use.
2. Start the Camtasia software
3. Record screen

Facilitator Script

Hi, [_____]. My name is Brandon, and I'm going to be walking you through this session today.

Before we begin, I am going to share some information with you.

I am asking people to take a look at a website I designed for my Master's project in my LTEC course. I would like to see what you think of the website and how you think you would complete a few tasks with an interface like this. The session should take about an hour.

The first thing I want to make clear right away is that I am not testing you. You can do nothing wrong in this exercise. I am testing the *website*. Not you.

As you complete the tasks, I'm going to ask you as much as possible to try to *think out loud*: to say what you're looking at, what you're trying to do, and what you're thinking. This will be helpful to me.

Please do not worry that you will hurt my feelings. This is being conducted to improve the design and *website*. I need to hear your honest reactions to the *website*.

If you have any questions as we go along, please feel free to ask them. However, since I am interested in how people navigate the *website* when they do not have someone who can assist; I will answer your questions once we have completed the *website*.

Lastly, if you need to take a break at any point, just let me know. Do you have any questions so far?

- *Ask participant a few preliminary questions:*

Before we look at the site, I would like to ask you a few quick questions about your experiences.

1. What is your occupation?
2. On a scale of 1 to 5, with 1 representing not at all and 5 representing very knowledgeable, do you know what Early College is?
3. On a scale of 1 to 5, with 1 representing not at all and 5 representing very knowledgeable, do you know where to go to find information on Early College?
4. On a scale of 1 to 5, with 1 representing not at all and 5 representing very knowledgeable, do you know of any on-line resources for Early College?

Thank you very much. We are done with the questions, and we can begin testing the site.

- *Have participants explain orally what they think of the websites overall appearance for one to two minutes:*

I'm going to ask you to look at the homepage and tell me what you make of it. What strikes you about it? Do you know what the site is about? What you can do on the site? What is the site for? Just look around and do a little narrative. You can scroll around if you need to.

- *Ask participant to complete a few specific tasks (be sure to give the participant a handout of the scenarios):*

Thank you for doing this. You did a great job on this. Now we are going to move onto the next part where I will ask you to complete specific tasks. I will read out loud each task. Here is a copy of the copy of the tasks for your information. Much like before, I am going to ask that you think out loud as much as possible as this will be useful for improving the website.

Allow the user to proceed from one ask to the next until you don't feel like it is producing any value or the user becomes very frustrated. Repeat for each task or until time runs out.

List of tasks:

Task 1. You want to know more information about the UHWO Early College program and what it can do for students. Find where you can accomplish this. (Participant should navigate to the Learn page. Participants should take no more than one minute to navigate to page. Answers RQ1).

Task 2. You want to know how students can enroll within the UHWO Early College program. Find where you can go to accomplish this. (Participant should quickly navigate to the Apply Page and locate the videos on the application process. Participants should take no more than one minute to navigate to page. Answers RQ1).

Task 3. You want to know more about the classes that the UHWO Early College program offers. Find where you can accomplish this. (Participants should navigate to the Classes page and locate

the course description documents. Participants should take no more than one minute to navigate to page. Answers RQ1).

Task 4. After reading through this website, you have further questions about the UHWO Early College program and want to know more. Find where you can accomplish this. (Participants should navigate to the Contact page. Participants should take no more than one minute to navigate to page. Answers RQ1).

Thanks, that was very helpful.

We are done with the main questions, but I have a few more general questions to ask you.

1. On a scale of 1 to 5, with 1 representing very difficult and 5 representing very easy, how would you rate your experience during today's testing? Why do you rate it that way?
2. After participating in this study, would you recommend this website to any of your peers? Why or why not?
3. Is there anything you were hoping to see that you didn't? Anything that you thought was missing? What was that and why should it be included?

That's the last question, do you have any questions for me, now that we're done?

I want to thank you for your time and willingness to be a participant in this study.

- ***Stop the Camtasia software***

After the Session:

1. Save screencast to your local computer.
2. Quickly scrub through the video to ensure the integrity of the audio and video.
3. After completing session, encrypt and save video to external hard drive.

Appendix C – Pre-Survey

Pre-Survey:

1. Pin Code:
 - a. (Fill-in Blank)
 - b. * Required Question
2. Age
 - a. (Fill-in Blank)
3. Gender
 - a. Male
 - b. Female
 - c. Prefer Not to Say
4. Job Title
 - a. (Fill-in Blank)
5. How long have you been employed by the HIDEOE?
 - a. (Fill-in Blank)
6. I know a lot the UHWO Early College Program:
 - a. (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree)
7. I know where to find information about the UHWO Early College Program:
 - a. (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree)

Appendix D – Post Survey

1. Pin Code
 - a. (Fill-in Blank)
 - b. * Required Question

System Usability Scale:

1. I think that I would like to use this website frequently.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
2. I found this website unnecessarily complex.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
3. I thought this website was easy to use.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
4. I think that I would need assistance to be able to use this website.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
5. I found various functions on this website were well consolidated.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
6. I thought there was too much inconsistency with the design of this website.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
7. I would imagine that most people would learn to use this website very quickly.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
8. I found this website very cumbersome/awkward to use.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
9. I felt very confident using this website.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
10. I needed to learn a lot of things before I could get going with this website.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

DEEP Analysis: Focused on Content, Structure/information of the content, Navigation, and Labeling.

Content:

1. The content of the website (including text, pictures, audios, and videos) was easy to understand.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
2. The content (including text, pictures, audio, and videos) of the website was what I expected.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
3. The wording of the text was clear.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

Structure/Information:

1. Under each section of the website, the web pages were well organized.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
2. The organization of the website was clear.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

3. I could easily locate all related information in one section.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
4. Some web pages were too short.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
5. Some web pages were too long.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

Navigation:

1. It was easy to find the information I needed on the website.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
2. Learning to find my way around this website was a problem.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
3. The website provided enough guidance for me to navigate through content.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
4. This website helped me to find what I was looking for.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

Labeling:

1. When I skimmed through the labels, I knew where to click.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
2. I got what I expected when I clicked on things in this website.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
3. The headings of the web pages were easy to understand.
 - a. Likert Scale 1-5. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

Satisfaction Survey:

1. Based on your interaction with the UHWO Early College Website, please rate your experience.
 - a. Likert Scale 1-5. Extremely Dissatisfied, Dissatisfied, Neutral, Satisfied, Extremely Satisfied
2. Overall, how satisfied or dissatisfied are you with the website?
 - a. Likert Scale 1-5. Extremely Dissatisfied, Dissatisfied, Neutral, Satisfied, Extremely Satisfied
3. How would you rate the quality of the content of the website?
 - a. Likert Scale 1-5. Very Low Quality, Low Quality, Neutral, High Quality, Very High Quality
4. How likely is it that you would use this website?
 - a. Likert Scale 1-5. Extremely Unlikely, Unlikely, Neutral, Likely, Extremely Likely
5. How likely are you to recommend this website?
 - a. Likert Scale 1-5. Extremely Unlikely, Unlikely, Neutral, Likely, Extremely Likely
6. Do you feel this website is missing anything?
 - a. Open-Ended Question. Please Explain.
7. Is there anything you feel the researcher needs to know?
 - a. Open-Ended Question. Please Explain.

Appendix E – Consent Form



University of Hawai'i
Consent to Participate in a Research Project

Dan Hoffman, Principal Investigator

Brandon Carlos, Co-Investigator

Project title: The Usability of an Early College Resource Website

Aloha! My name is Brandon Carlos and you are invited to take part in a research study. I am a graduate student at the University of Hawai'i at Mānoa in the College of Education. As part of the requirements for earning my graduate degree, I am doing a research project.

What am I being asked to do?

If you participate in this project, I will meet with you for an interview at a location and time convenient for you.

Taking part in this study is your choice.

Your participation in this project is completely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss to you.

Why is this study being done?

The purpose of my project is to evaluate the usability of the UHWO Early College Resource website. I am asking you to participate because the target audience for this website is HIDOE high school counselors.

What will happen if I decide to take part in this study?

The interview will consist of four scenarios in which you will need to perform tasks using the website. It will take an hour to complete.

The interview questions will include questions like, “Do you know what Early College is?” or “Do you know where to find information about UHWO’s Early College program?”

Only you and I will be present during the interview. With your permission, I will audio-record the interview so that I can later transcribe the interview and analyze the responses. You will be one of about 12 people I will interview for this study. With your permission, I will also video-record the interview so that I can analyze your computer screen movements during the interview.

What are the risks and benefits of taking part in this study?

I believe there is little risk to you for participating in this research project. You may become stressed or uncomfortable answering any of the interview questions or discussing topics with me during the interview. If you do become stressed or uncomfortable, you can skip the question or take a break. You can also stop the interview or you can withdraw from the project altogether.

There will be no direct benefit to you for participating in this interview. The results of this project may help improve the usability of the UHWO Early College website for high school counselors who will interact with it.

Privacy and Confidentiality:

I will keep all study data encrypted on a password protected external hard drive. Only my University of Hawai'i advisor and I will have access to the information. Other agencies that have legal permission have

the right to review research records. The University of Hawai'i Human Studies Program has the right to review research records for this study.

After I write a copy of the interviews, I will erase or destroy the audio-recordings. When I report the results of my research project, I will not use your name. I will not use any other personal identifying information that can identify you. I will use pseudonyms (fake names) and report my findings in a way that protects your privacy and confidentiality to the extent allowed by law.

Compensation:

You will receive a \$5 gift certificate to Starbucks for your time and effort in participating in this research project.

Future Research Studies:

Even after removing identifiers, the data from this study will not be used or distributed for future research studies.

Questions:

If you have any questions about this study, email me at bcarlos@hawaii.edu. You may also contact my advisor, Dr. Dan Hoffman, at (808) 956-5664 or email at hoffman2@hawaii.edu. You may contact the UH Human Studies Program at (808) 956-5007 or uhirb@hawaii.edu to discuss problems, concerns and questions; obtain information; or offer input with an informed individual who is unaffiliated with the specific research protocol. Please visit <http://go.hawaii.edu/jRd> for more information on your rights as a research participant.

If you agree to participate in this project, please sign and date this signature page and return it to: Brandon Carlos

Keep a copy of the informed consent for your records and reference.

Signature(s) for Consent:

I give permission to join the research project entitled, "*The Usability of an Early College Resource Website*."

Please initial next to either "Yes" or "No" to the following:

_____ Yes _____ No I consent to be audio-recorded for the interview portion of this research.

_____ Yes _____ No I consent to my computer screen being video-recorded for the usability portion of this research.

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent: _____

Date: _____

Mahalo!

Appendix F – UHWO Early College Resource Website Version 1

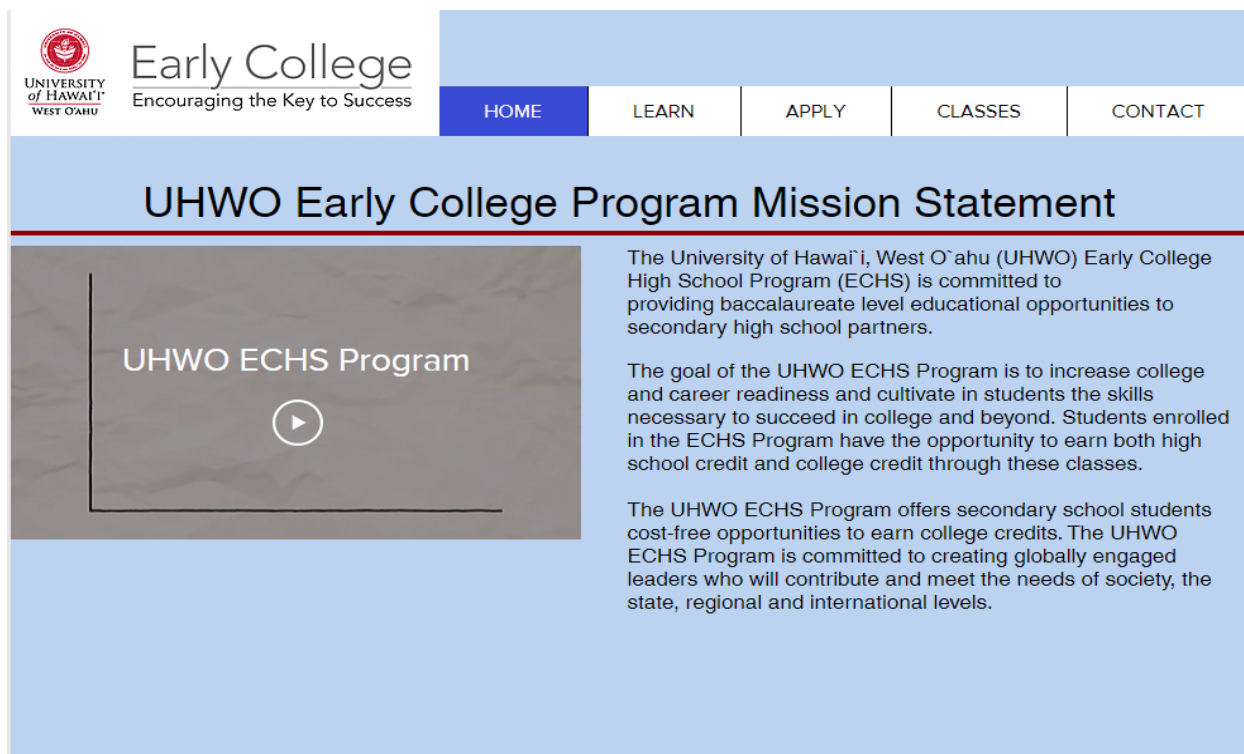


Figure F1. Home Page

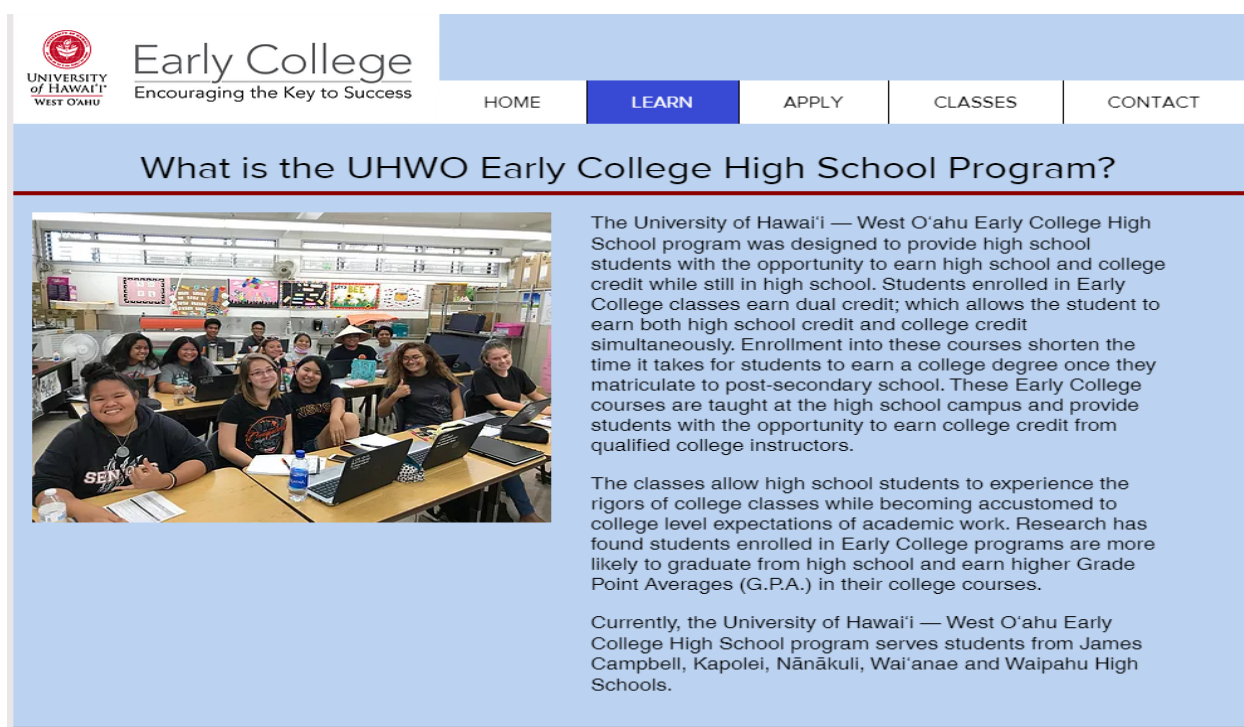



Figure F2. Learn Tab

ADA Accommodations



[Back to Top](#)


The University of Hawai'i - West O'ahu is committed to ensuring its programs and services are entirely and equally accessible to individuals with disabilities in accordance with the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973 (504).

Additionally, students can email the ADA/504 Coordinator for the Center for Student Access, Tom Hirsbrunner, at hirsbrun@hawaii.edu or call (808) 689-2935 to set-up an appointment. At the meeting, the student may need to bring their IEP or 504 documentation. In addition, please provide documentation of disability from a professional, typically a doctor or psychologist. The documentation should state (a) the disability, (b) how it affects the student's academic work, and (c) recommended accommodations for the coordinator to review.

Please click on the button below to visit the University of Hawai'i West O'ahu ADA Intake Form. This form is to collect information on how best to help and support students.

[UHWO ADA Intake Form](#)


Figure F3. Learn Tab Continued



Early College
Encouraging the Key to Success

[HOME](#)
[LEARN](#)
[APPLY](#)
[CLASSES](#)
[CONTACT](#)

How to Apply to the UHWO Early College High School Program?



Requirements

Students who are applying to the UHWO Early College Program must complete four requirements.

1. Students must apply online to UHWO Early College via the UH System Application (See below for instructions).
2. Must apply online via the Early College Dual Credit Applications (See below for instructions).
3. Must submit transcripts which show a cumulative G.P.A. of 2.7 or higher.
4. Must Submit their current health clearances (MMR and TB Clearance).

Transcripts and Health Clearances can be submitted to the UHWO Early College Program Coordinator.

Figure F4. Apply Tab

How to Complete the UH System Online Application

The first step in the application process for Early College, is to have students complete the online UH System Application:

[UH System Application](#)

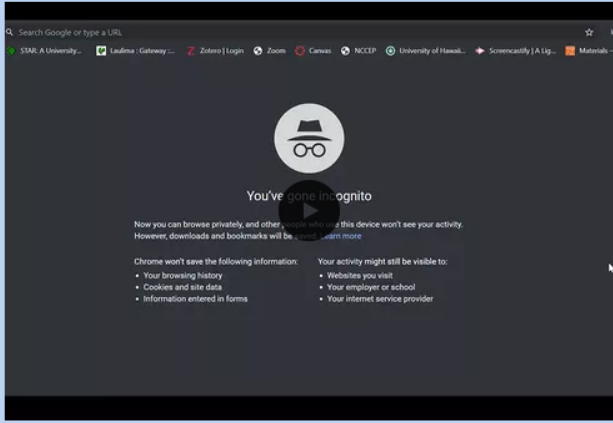
In this application, students will select the college they will be taking Early College classes from. They will need to state which semester they are applying (Fall, Spring or Summer). Students will also need to complete this online application in order to take Early College classes. This application also assigns the student with a unique UH ID number which will be used to register them into their Early College classes and allow students to keep track of their credits. For more information on how to complete this process, please click on the video to the left or click on the button below for a step-by-step guide on how to complete the application.

[UH System Guide \(No Link\)](#)

[Back to Top](#)

Figure F5. Apply Tab Continued

How to Complete the Dual Credit Application



Dual Credit Application Walk-through Video.

[Back to Top](#) [Full Screen Video](#)

The second step students will need to complete is the Dual Credit Application:


[Dual Credit App](#)

In this application, students will put in their information, and select the Early College course(s) they want to take and from which college they are taking the classes from. Students must select the classes which will be offered at their school. Once students complete the application, they must print it out. Students will need to sign the form. In addition, students parents/guardians, high school counselor and the principal must also sign the form.

For more information on how to complete this process, please click on the video to the left or click on the button below for a step-by-step guide on how to complete the dual credit application.

[Dual Credit Guide \(No Link\)](#)


Figure F6. Apply Tab Continued



Early College
Encouraging the Key to Success

[HOME](#) [LEARN](#) [APPLY](#) [CLASSES](#) [CONTACT](#)

UHWO EC Course Offerings



The UHWO Early College program offers a number of college classes which high schools can select to be offered at their campuses. These classes can allow students earn college credit which can be counted towards their future degrees. For a list of EC courses offerings or previous EC classes offered by high school, click on the buttons below:

[EC Class List Information](#) [UHWO EC Class History](#)

While there are a number of stand-alone course offerings, there are also two pathway programs which align with degrees offered at UHWO. These Early College Pathways are the Academy of Creative Media (ACM) and the Allied Health Pathway.

Figure F7. Classes Tab

UHWO EC ACM Pathway



UHWO ACM Faculty Teaching Students.



UHWO ACM Graduates.

In the ACM Pathway, students will take four core courses over their first two years. These classes are:

1. **ART 107D Introduction to Digital Photography (3):** This course is an introduction to digital photography. Students will learn basic camera techniques and how to process their images in digital format. This course will provide the student with basic aesthetic principles as well as an extensive range of practical photographic techniques needed for entry into the photographic workplace and/or for artistic expression. It provides experience in traditional and contemporary photographic techniques for art, multimedia, and television.
2. **ART 112 Introduction to Digital Art (3):** This course is an introduction to the technology, vocabulary and procedures of computer produced images. Students will study the basic principles of art and the elements of design, creative process and methods of visual communication. Using the computer as the artist's tool, students will study the creation of art and design through the usage of layout devices such as composition, visual hierarchy, content development and concept development.
3. **ART 126 3D Graphics (3):** This course explores introductory level conceptual and technical topics in 3D computer graphics. Autodesk Maya and related applications will be utilized to develop projects which integrate 3D modeling, UV layout, texture mapping, lighting and rendering.
4. **CM 120 Introduction to Digital Video (3):** In the course, students will develop basic skills in video production. The course will emphasize the technical aspects of digital cinematography and sound recording as well as fundamentals of field production in terms of conceptual development, planning, writing, story-boarding, editing, and project management. In addition, students will be introduced to basic rules of visual composition, sequencing and storytelling.

In addition to these four core courses, high schools can select two additional ACM courses to be taught at the high school. Please contact the UHWO Early College Program Coordinator for more information on these classes.

For more information on how these classes align with the UHWO Bachelor of Arts in Creative Media degree, click on the links to view the degree program sheets.

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[Communications & New Media](#)

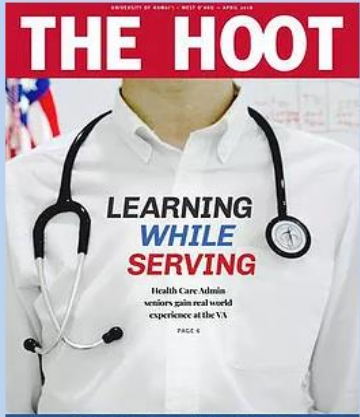
[Design & Media](#)

[Game Design & Development](#)

[General Creative Media](#)

Figure F8. Classes Tab Continued

UHWO EC Allied Health Pathway



UHWO Hoot Newsletter Announcing New Health Degree.

In the Allied Health Pathway, students will take three core classes within their first two years in the pathway. These classes are:

1. **PUBA 101 Intro to Health Care Admin (3):** This course introduces students to the fundamentals of healthcare administration and the U.S. healthcare system. Important topics such as the provision of health care, financing, delivery and resources are discussed in a wide variety of health care settings, ranging from hospitals to nursing homes to ambulatory care centers. The various roles of healthcare providers and administrators are also described.
2. **PUBA 104 Intro to Community Health (3):** This course examines the history, philosophy, and principles of community health in efforts to teach students how to define community health problems, develop evidence-based recommendations for interventions, understand prevention and control measures, and implement and evaluate the impact of strategies for addressing a community health problem. Methods for changing health behavior, health communications methods, the roles and regulations of health service delivery institutions, financing mechanisms, and an understanding of community health care and health systems including the quality of care, access to care and cost of care will also be addressed.
3. **HLTH 117 Survey of Health Professions (3):** This course will explore the health profession from many different perspectives, including health professionals, health science, behavioral health, health organizations, certification and licensure, community and patient experience. The concept of professionalism and trans-disciplinary teamwork will be introduced from the beginning of the course.

Please contact the UHWO Early College Program Coordinator for more information on this pathway.

For more information on how these classes align with the UHWO Bachelor of Applied Science in Health degree, click on the links to view the degree program sheets.

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Health Sciences

Health Management

Healthcare Admin

Figure F9. Classes Tab Continued

UNIVERSITY of HAWAII WEST OAHU

Early College
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HOME LEARN APPLY CLASSES CONTACT

Contact Us!
Please Enter Your Contact Information and Subject.

First Name Last Name

Email Subject

Type your message here...

Submit

Thanks for submitting!

Figure F10. Contact Page

Appendix G – UHWO Early College Resource Website Final Version

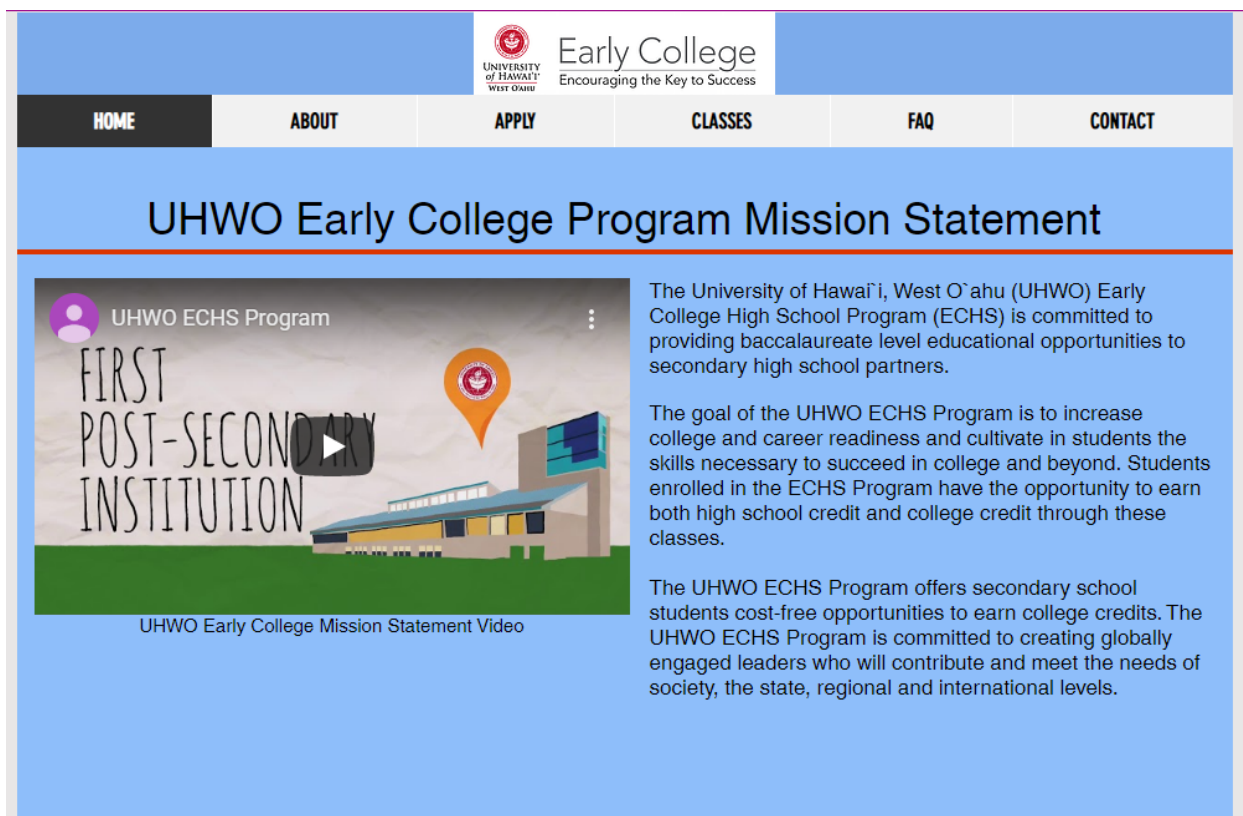


Figure G1. Redesigned Home Page

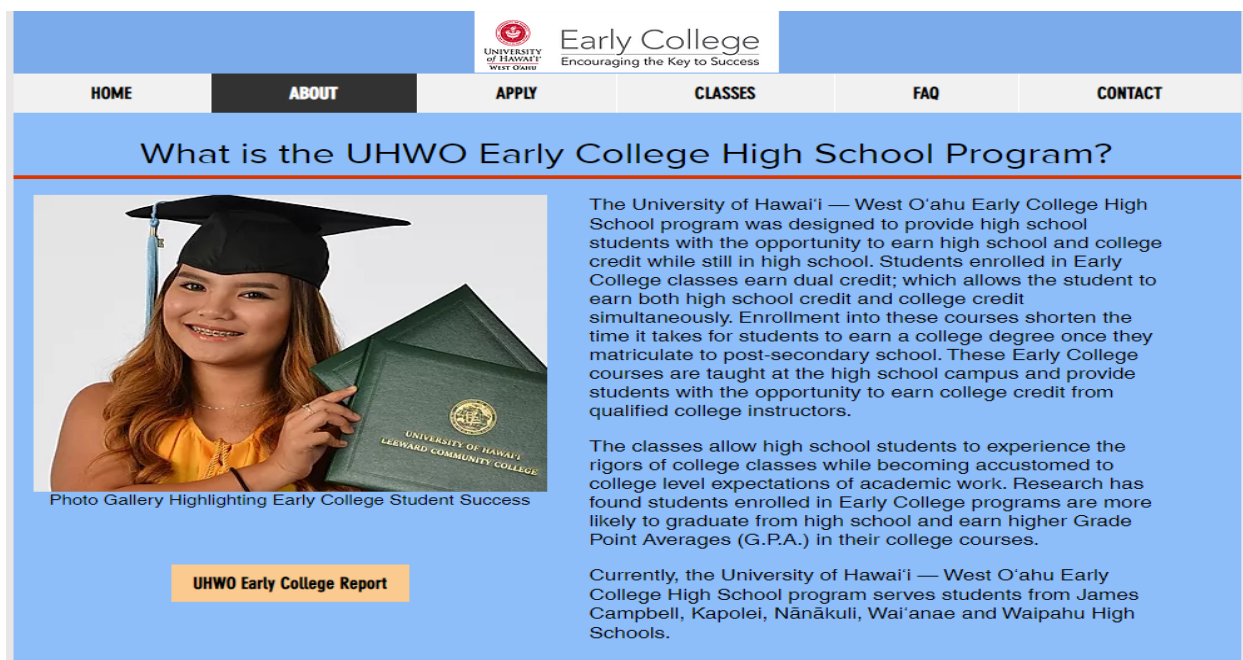


Figure G2. Redesigned About Tab

UHWO ADA Accommodations For Early College

What is ADA?

The Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination based on disability in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.

ADA at UH - West O'ahu

The University of Hawai'i - West O'ahu is committed to ensuring its programs and services are entirely and equally accessible to individuals with disabilities in accordance with the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973 (504).

How Can I Receive ADA Accommodations?

Students who need accommodations should contact the University of Hawai'i - West O'ahu ADA Coordinator, Tom Hirsbrunner, at hirsbrun@hawaii.edu or call (808) 689-2935 to set-up an appointment.

What Services Will I Receive?

Students who need accommodations should contact the University of Hawai'i - West O'ahu ADA Coordinator, Tom Hirsbrunner, at hirsbrun@hawaii.edu or call (808) 689-2935 to set-up an appointment.

Click to Learn More

[Back to Top of Page](#)

The University of Hawai'i - West O'ahu is committed to ensuring its programs and services are entirely and equally accessible to individuals with disabilities in accordance with the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973 (504).

Additionally, students can email the ADA/504 Coordinator for the Center for Student Access, Tom Hirsbrunner, at hirsbrun@hawaii.edu or call (808) 689-2935 to set-up an appointment.


At the appointment, the student may need to bring their IEP or 504 documentation. Please provide documentation from a doctor or psychologist stating:

- 1) the disability,
- 2) how it affects the student's academic work, and
- 3) recommended accommodations for the coordinator to review.

Please click on the button below to visit the University of Hawai'i West O'ahu ADA Intake Form. This form is to collect information on how best to help and support students.

[UHWO ADA Student Intake Form](#)

UHWO Title IX Policy



[UHWO Title IX Brochure](#)


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UHWO Title IX is committed to a policy of nondiscrimination on the basis of race, sex, gender, sexual orientation, age, religion, color, national origin, ancestry, disability, domestic violence, marital status, arrest and court record, and veteran status. (See the [University of Hawai'i Statement of Nondiscrimination and Affirmative Action Policy](#).) Policies and procedures addressing allegations of sex or gender-based discrimination and/or retaliation will be consistent with state and federal law.

Examples of prohibited behavior includes, but is not limited to: Sex discrimination; Sexual harassment; Gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; Sexual exploitation; Sexual assault; Domestic violence; Dating violence; and Stalking

[UHWO Title IX Student Report Form](#)

Figure G3. Redesigned About Tab



Early College
Encouraging the Key to Success

[HOME](#)
[ABOUT](#)
[APPLY](#)
[CLASSES](#)
[FAQ](#)
[CONTACT](#)

How to Apply to the UHWO Early College High School Program?

How To Apply To UHWO Early College?

Step 1: Apply Online Via UH System Application at uh.hawaii.edu/apply

Step 2: Complete Dual Credit Application at uh.hawaii.edu/dualcredit/

Step 3: Submit transcripts which show a cumulative G.P.A. of 2.7 or higher. Submit MMR and TB Clearance.

Click to Learn More

Requirements

Students who are applying to the UHWO Early College Program must complete four requirements.

1. Students must apply online to UHWO Early College via the [UH System Application](#) (See below for instructions).
2. Must apply online via the [Early College Dual Credit Applications](#) (See below for instructions).
3. Must submit transcripts which show a cumulative G.P.A. of 2.7 or higher.
4. Must Submit their current health clearances ([MMR and TB Clearance](#)).

Figure G4. Redesigned Apply Tab

1. How to Complete the UH System Online Application



UH System Application Walk-through Video.

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The first step in the application process for Early College, is to have students complete the online UH System Application:

[UH System Application Website](#)

In this application, students will select the college they will be taking Early College classes from. They will need to state which semester they are applying (Fall, Spring or Summer). Students will also need to complete this online application in order to take Early College classes. This application assigns the student with a unique UH ID number which will be used to register them into their Early College classes. For more information on how to complete this process, please click on the video to the left or click on the button below for a step-by-step guide on how to complete the application.

[UH System Guidebook](#)

2. How to Complete the Dual Credit Application



Dual Credit Application Walk-through Video.

[Back to Top of Page](#)

The second step students will need to complete is the Dual Credit Application:


[Dual Credit App Website](#)

In this application, students will put in their information, and select the Early College course(s) they want to take and from which college they are taking the classes. Students must select the classes which will be offered at their school. Once students complete the application, they must print it out. Students will need to sign the form. In addition, students' parents/guardians, high school counselor and the principal must also sign the form.

For more information on how to complete this process, please click on the video to the left or click on the button below for a step-by-step guide on how to complete the dual credit application.

[Dual Credit Guidebook](#)


Figure G5. Redesigned Apply Tab



Early College
Encouraging the Key to Success

HOME
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CONTACT

UHWO EC Course Offerings




The UHWO Early College program offers a number of college classes which high schools can select to be offered at their campuses. These classes can allow students earn Dual Credit which can be counted towards their future degrees. For a list of EC courses offerings or previous EC classes offered by high school, click on the buttons below:

[EC Class List Information](#)
[UHWO EC Class History By High School](#)

While there are a number of stand-alone course offerings, there are also two pathway programs which align with degrees offered at UHWO. These Early College Pathways are the Academy of Creative Media (ACM) and the Allied Health Pathway.

Figure G6. Redesigned Classes Tab

UHWO EC 2.0 Academy for Creative Media Pathway

UHWO ACM Photo Gallery.

UHWO ACM Program Sheets. Click to Learn More

[Communications & New Media](#)
[Design & Media](#)

[Game Design & Development](#)
[General Creative Media](#)

In the ACM Pathway, students will take four core courses over their first two years. These classes are:


- 1. ART 107D Introduction to Digital Photography (3):** This course is an introduction to digital photography. Students will learn basic camera techniques and how to process their images in digital format. This course will provide the student with basic aesthetic principles as well as an extensive range of practical photographic techniques needed for entry into the photographic workplace and/or for artistic expression.
- 2. ART 112 Introduction to Digital Art (3):** This course is an introduction to the technology, vocabulary and procedures of computer produced images. Students will study the basic principles of art and the elements of design, creative process and methods of visual communication. Students will study the creation of art and design through the usage of layout devices such as composition, visual hierarchy, content development and concept development.
- 3. ART 113D Introduction to Digital Drawing (3):** An introduction course for students who are interested in developing communication skills in the area of two dimensional drawing as it relates to computer-based imaging.
- 4. CM 120 Introduction to Digital Video (3):** In the course, students will develop basic skills in video production. The course will emphasize the technical aspects of digital cinematography and sound recording as well as fundamentals of field production in terms of conceptual development, planning, writing, story-boarding, editing, and project management.

In addition to these four core courses, high schools can select two additional ACM courses to be taught at the high school.

For more information on how these classes align with the UHWO Bachelor of Arts in Creative Media degree, click on the links to the left to view the degree program sheets.

Figure G7. Redesigned Classes Tab

UHWO EC 2.0 Allied Health Pathway



UHWO Allied Sciences Photo Gallery.

UHWO Allied Sciences Program Sheets. Click to Learn More


[Health Sciences](#)
[Healthcare Admin](#)
[Health Management](#)

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In the Allied Health Pathway, students will take three core classes within their first two years in the pathway. These classes are:

- 1. PUBA 101 Intro to Health Care Admin (3):** This course introduces students to the fundamentals of healthcare administration and the U.S. healthcare system. Important topics such as the provision of health care, financing, delivery and resources are discussed in a wide variety of health care settings, ranging from hospitals to nursing homes to ambulatory care centers.
- 2. PUBA 104 Intro to Community Health (3):** This course examines the history, philosophy, and principles of community health in efforts to teach students how to define community health problems, develop evidence-based recommendations for interventions, understand prevention and control measures, and implement and evaluate the impact of strategies for addressing a community health problem. Methods for changing health behavior, health communications methods, the roles and regulations of health service delivery institutions, financing mechanisms, and an understanding of community health care and health systems including the quality of care, access to care and cost of care will also be addressed.
- 3. HLTH 117 Survey of Health Professions (3):** This course will explore the health profession from many different perspectives, including health professionals, health science, behavioral health, health organizations, certification and licensure, community and patient experience. The concept of professionalism and trans-disciplinary teamwork will be introduced from the beginning of the course.

Figure G8. Redesigned Classes Tab

**Early College**
Encouraging the Key to Success

HOMEABOUTAPPLYCLASSES**FAQ**CONTACT

UHWO Early College Frequently Asked Questions

1) How do students activate their UH usernames?

In order to activate their UH usernames, students must be accepted Early College students. Students must also know their unique 8 digit UH ID number. This information can be provided by the UHWO Early College Coordinator. Students can visit this website: hawaii.edu/username/ to create their username.
For a step-by-step guide, click on this link: [Activating UH Username](#)

2) How do students request their UHWO transcripts for their Early College credits?

Students can request their transcripts Office of the Registrar by submitting the [Transcript Request Form](#) or online via the [National Student Clearinghouse](#). For more information, please visit westoahu.hawaii.edu/transcripts/.
Transcripts will cost \$5 per copy and will take 5-7 business days to be received.

3) What types of academic support are available to students?

Early College students have access to UHWO resources such as the [UHWO Library](#), and the [No'eau Writing Center](#).
Students can use the library computers and check out books. The hours of operation for the library is 7:30am - 9:00pm Monday thru Thursday; Fridays 7:30am - 5:00pm; and Saturdays 10:00am - 5:00pm.
Students can also visit the No'eau Writing Center located in the library for feedback on their papers. The hours of operation for the No'eau Writing Center is 8:30am - 4:30pm, Monday thru Friday.

4) Does Early College follow the HIDOE school calendar?

No, UHWO Early College follows the [UHWO Academic Deadlines & Calendar](#). All Early College classes begin and end when UHWO classes are in session.
Additionally, you can find the HIDOE Calendar [Here](#)

5) Can students still play sports in high school while taking Early College?

The majority of Early College classes are taught after high school hours. This may create difficulties for students to attend both after school sports/activities and Early College classes. Students should consider to devote themselves to only one activity. This is especially important as their Early College grades can affect their high school GPA.

6) Can Early College courses be applied as high school electives?

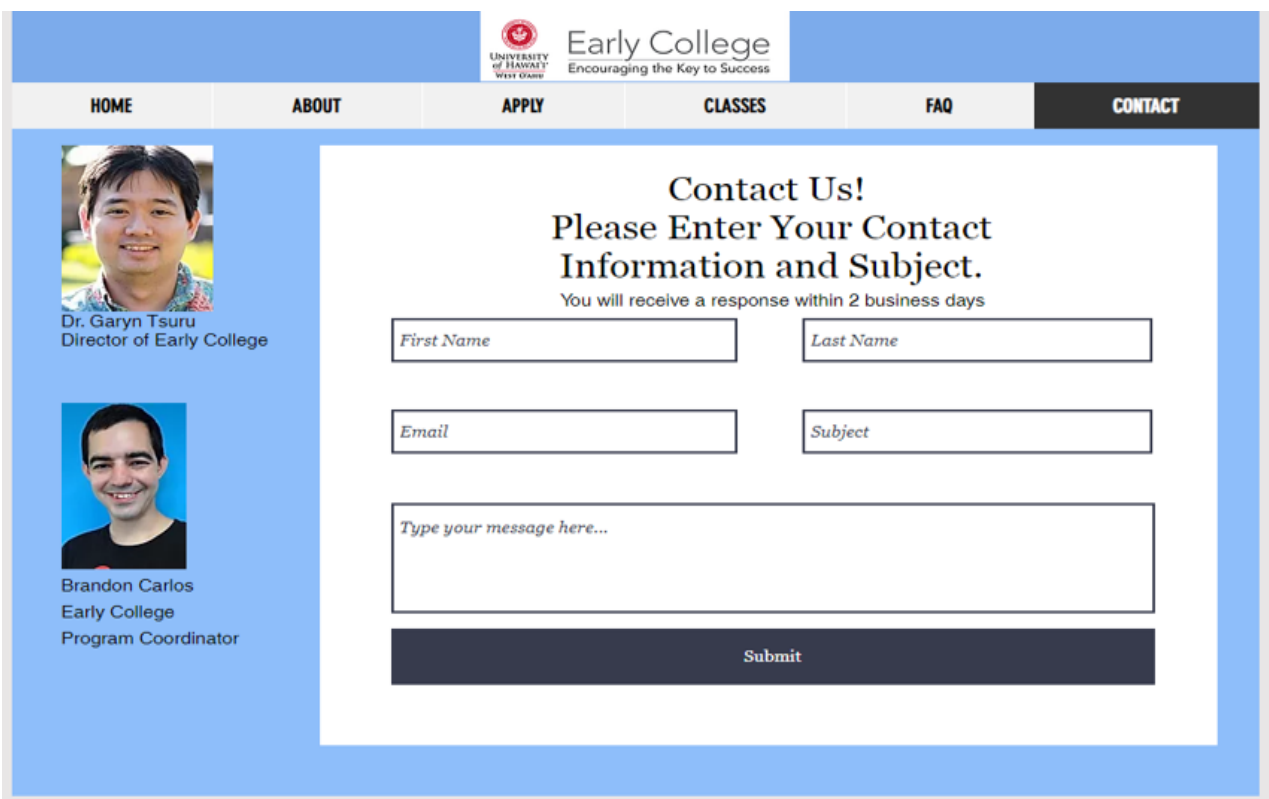
Yes. Many Early College classes can either count as Dual Credit for required high school course. While other Early College courses can be used to count as high school elective credit.

7) Does Early College help students graduate from college faster?

Yes, Early College classes can help students graduate from college faster. However, if students attend any UH System Campus, their credits will transfer. But if students attend non-UH System campuses, there credit may or may not transfer based upon that institutions transfer credit policies. Students should keep a copy of their syllabus for all their Early College classes.

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Figure G9. FAQ Tab



The image shows a web page for Early College, University of Hawaii West Oahu. The page has a blue header with the university logo and the text "Early College Encouraging the Key to Success". Below the header is a navigation bar with links: HOME, ABOUT, APPLY, CLASSES, FAQ, and CONTACT. The CONTACT link is highlighted in black. The main content area is divided into two columns. The left column features two portraits of staff members: Dr. Garyn Tsuru, Director of Early College, and Brandon Carlos, Early College Program Coordinator. The right column contains a contact form titled "Contact Us! Please Enter Your Contact Information and Subject." with a subtext "You will receive a response within 2 business days". The form includes input fields for First Name, Last Name, Email, and Subject, a large text area for the message, and a Submit button.

UNIVERSITY OF HAWAII WEST OAHU

Early College
Encouraging the Key to Success

HOME ABOUT APPLY CLASSES FAQ CONTACT

Contact Us!
Please Enter Your Contact Information and Subject.
You will receive a response within 2 business days

First Name Last Name

Email Subject

Type your message here...

Submit

Dr. Garyn Tsuru
Director of Early College

Brandon Carlos
Early College
Program Coordinator

Figure G10. Redesigned Contact Tab

Appendix H – CITI Certification



Figure H1. Exempt Researchers and Key Personnel



Figure H2. Exempt Researchers and Key Personnel IPS



Figure H3. Non-Exempt Social Behavioral Sciences



Figure H4. Non-Exempt Social Behavioral Sciences IPS